EPC and Chemical process industry- Role and responsibilities in Covid-19 situation

Chemical companies including process industries need EPC companies to accomplish a project to bring value for money for the investment that they have made. Secondly, EPC companies should be able to construct an energy efficient plant where the customer has reasonable energy consumption in contrast to the international standards.

There are already clusters of chemical companies in various parts of the country, while one state has a huge chemical industry cluster and another state does not hold even a single portion of the industry. However, there are new industrial policies which are being formed by the government presently which has taxation benefits and investment returns for the investors. Chemical will be a priority sector in the future and therefore there is a demand for EPC in all dimensions of chemical process industry.

Few states in India where the chemical ecosystem has developed have the advantage of reaping a bigger portion of the returns. But now with the new GST design, industries will be spread across the country which till now was limited in certain states. There are two issues which need to be resolved in the near future viz., chemical plants to be upgraded to the environment friendly standards which will open up a lot of necessities and potential for EPC companies to work in this area and make the plants compliant to the future environmental laws. Moreover, modernization and up gradation certify lesser consumption of raw materials, increasing productivity and making the plant more energy efficient and these two factors as discussed above for plant up gradations in the future will give huge opportunities for EPC market.

EPC requirements in India will be emerging more because of the open markets there will be no domination in the access to technology and adoption. India is an exporter of different types of technologies; R&D is happening in the country and so is networking with technology proprietors all over the world. The only issue is that our energy cost is very high- power cost, oil or gas cost for running various processes in a chemical plant is very high. This is a blockade for the growth of the industry in India but as the country is working in all these issues aggressively, various energy cost is going down due to several government efforts.

Currently, in India, there are no in-house EPC companies and for this reason a more methodical approach, necessary skilled manpower, government support for the growth of this industry is required. Countries like China who are huge into the EPC business get various facilities such as softer loans, support bank guarantees etc. which give much needed stimulus to EPC companies.

The current global pandemic situation has dire consequences for the energy & natural resources sector, including on energy and petrochemical development projects and revamp / refurbishment projects across the sub-systems in the energy & natural resources plethora. The majority of such projects are usually governed by so-called Engineering, Procurement and Construction (EPC) Contracts, which often follow international templates prepared by international organizations such as the International Federation of Consulting Engineers (FIDIC).

Energy sector and petrochemical development projects are complex and typically involve longer-term commitments from both the Project Owner and the EPC Contractor, requiring a substantial period of time to bring such projects to completion, often in the range of 12 – 24 months or more. Needless to say, larger-scale energy sector EPC projects are very often of also high-value, in the several hundreds of millions of euros or dollars range, with high stakes for both the Project Owners and the EPC Contractors. As a consequence, the full scale of risks and exposures stemming from the global pandemic situation can hardly be predicted.

Different EPC Contract phases involving different key risks

In general, different exposures exist in different phases of the EPC Contracts which can be broken down according to the main constituent parts of the EPC Contract, i.e. the design and engineering

Design & Engineering Phase	• Workforce disruption and inefficiencies due to home-office working of engineers
	• Delay in delivery of engineering works by the Contractor
	• Longer response times by the Owner
	• Knock-on effect of the delays accumulated during the design & engineering phase to the procurement phase
Procurement Phase	• Supply chain disruption - one or more key suppliers unable to deliver, partly or entirely
	• Increase of the costs of supplies, goods and materials
	• Inability to perform in-the-shop observing of key equipment manufacturing due to travel bans
	• Transportation disruption - transportation routes becoming closed down by public authority or government intervention
	• Difficulties with replacing stranded suppliers and/or finding new transportation routes
	• Long-lead items becoming stranded whilst under transportation
Construction Phase	• Workforce disruption potentially arising from several factors including inability to bring workforce to the site, restrictions on using large-scale workforce on site, contamination among workers on the site etc.
	• Revisiting Health, Safety & Environment (HSE) policies and re-defining best HSE approach to on-site activities
	• Liability for contamination / spread of the coronavirus
	• Delays due to numerous factors, including lack of workforce, impairment of transportation of equipment, ban on travel to the site of required experts for e.g. installation works etc.
	• Breach of financing agreement by the Project Owner
	• Delays of the public authorities in issuing permits, or providing approvals/consents

Fig 01

phase, the procurement and then the construction phase. These may include the following risks connected to the COVID-19 crisis (Fig 01):

Mitigating the risks posed by the coronavirus crisis for EPC projects, some of which we have outlined in the table above, is not only complex and difficult due to the unpredictability of the situation, but requires careful and coordinated assessment of the current and the forthcoming period, alignment between the Project Owner and the EPC Contractor, even possibly with the involvement of key suppliers and subcontractors of the EPC Contractor. Moreover, with respect to several risk factors, the involvement of public authorities will also be desirable and often even required. Importantly, if a serious disruption affects a major EPC project in the energy & natural resources space, this could have very substantial economic impact for the economic viability of the entire project, as the Project Owner may not be able to start commercial operation at times when it would be badly needed to generate revenues or, in case of e.g. revamp projects, may run into huge losses by a delay in re-commencing the operation of its refurbished units.

This puts additional burdens on both the Project Owner and the EPC Contractor, whose teams are normally already under significant pressure during the implementation phase of any complex energy sector EPC project. This means that the parties to EPC Contracts will need to find novel ways to quickly identify, assess and find solutions for the most relevant risks for their common project – failing which disputes will become inevitable.

Ultimate Objective

Another essential point to determine is whether the Project Owner or the EPC Contractor is what the ultimate objective is in the crisis situation in terms of EPC Contract. Do the intention is to save the project and continue with the EPC Contract, or do rather seek a temporary relief from payment and/or performance obligations thereunder? Or actually want to terminate or cancel the project entirely?

In any case, having extensively assisted clients on both sides of the trenches, that this never-seen-crisis will ultimately show that both Project Owners and EPC Contractors have a genuine interest to promptly start good faith discussions with each other to properly assess the actual scale and scope of the risks affecting their EPC Contract due to the coronavirus pandemic, and also with a view to find amicable solutions to handle such risks as best as is possible in the fast-changing circumstances. In the course of such good faith discussions the Parties should address issues such as:

a) What impacts the Parties can identify to the works falling under the scope of the EPC Contract;

b) To what extent the project implementation schedule (including in particular the milestones and the final completion date), the procurement plan and the transportation study have to be revisited and, possibly, amended;

c) Does the coronavirus crisis constitute an event of Force Majeure under the given EPC contract and, if yes, has appropriate notice thereof been given by the affected Party;

d) Is there any delay at present or imminently threatening which qualifies as a material breach of the EPC Contract, has an event of default occurred or is it imminent;

e) Is there any circumstance, which could trigger either liquidates damages payment obligation or a termination right of either or both Parties;

f) Is there any Governmental or other local law or regulation which makes it impossible or unlawful for either or both Parties to fulfil their contractual obligations or which, under the governing law of the EPC Contract, entitles any of the Parties to be released from its obligations under the EPC Contract;

g) Does the change in law provision (if any) under the EPC Contract apply to the present situation and, if yes, with what consequences;

h) Are there any grounds to invoke the suspension or termination mechanisms under the EPC Contract and, if yes, what are those grounds and with what consequences?

The principle of, "Build it, and the buyer will come," is no longer applicable. The availability of low-cost feedstock is not enough to guarantee return on investment. The need to satisfy specific regional demands, as opposed to the complexity of a worldwide distribution chain, has grown in importance.

As a result of this scenario, licensors and EPC contractors must deliver their own new value propositions based on their worldwide regional networks and robust relationships with future-oriented investors. Market diversification and product innovation are the main drivers to be managed in the "new generation" of chemical EPC contractors. Therefore, technology and best-in-class engineering services are key factors. The market has already been utilizing strategies that flatten capital costs, such as leveraging global engineering centres of excellence or adopting modular construction, among other solutions.

In this respect, it is imperative to leverage a distinct, technology-driven business, as well as to embrace early involvement in clients' investment initiatives. From providing technical expertise to assisting with financing schemes, these methods will allow a company to contribute to overall project development.

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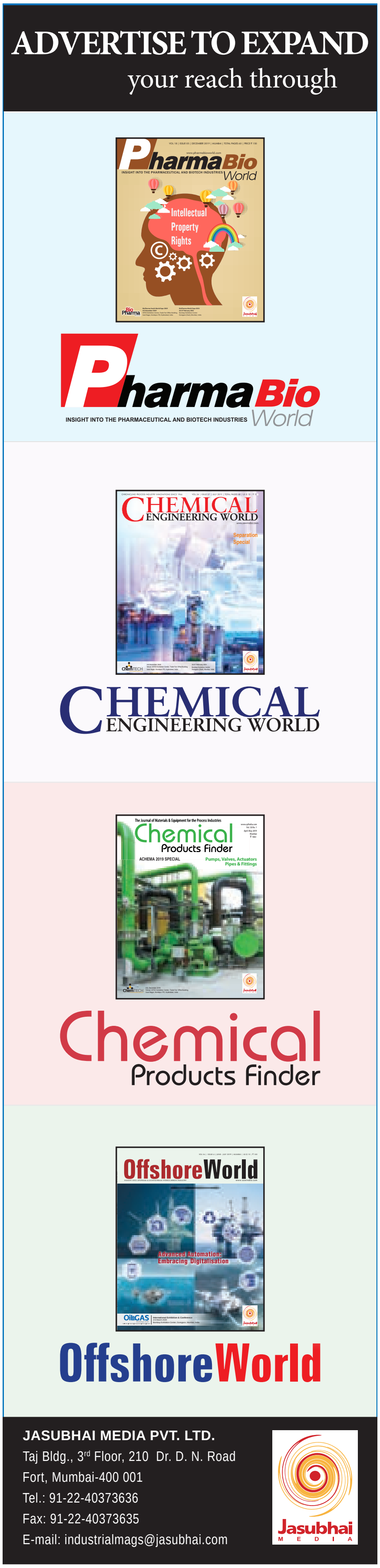

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